



## 5.0 STEP 5: DESCRIBING OPPORTUNITIES AND SETTING PRIORITIES

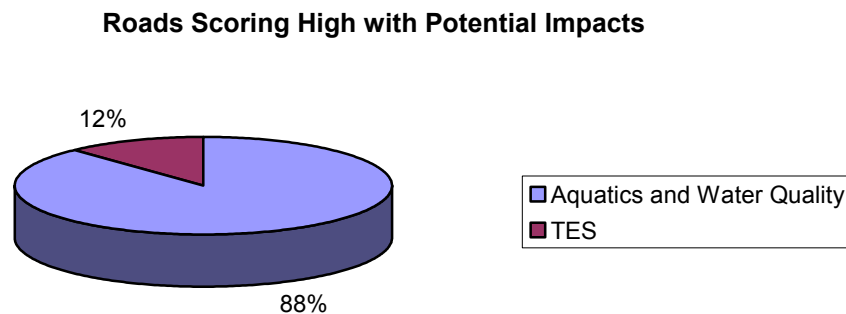
### 5.1 Problems and Risks Posed By the Roads Analysis Matrix

The Roads Analysis Matrix identified a score for each issue defined in Section 3.0, Identification of Issues. The scoring results are illustrated in the Roads Analysis Matrix in Appendix B. The scores are indicators that identify potential problems and risks posed by the existing roadway. The score for each issue in Section 3.0 represent a numeric indicator. The higher the numeric indicator, the greater the potential for resource impacts caused by the roadway and the lower the numeric indicator, the lower the potential for resource impacts. These indicators were used to score each issue per roadway. After each issue was scored per roadway, the scoring results were further sorted to identify the highest overall score per roadway. The overall score per roadway is ranked as “high”, “medium”, “low”, and “none”. The highest overall score per roadway is illustrated in Figures 6A – 6F for each Ranger District.

#### **Medford – Park Falls Ranger District**

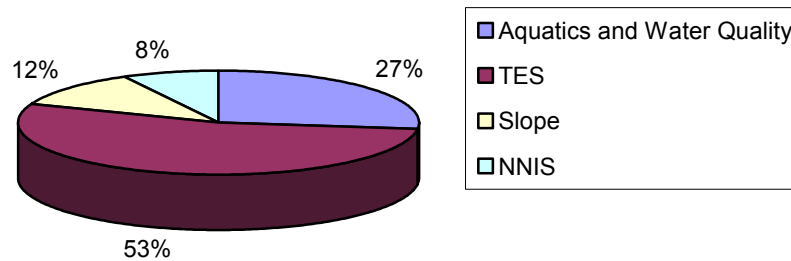
The scoring results for the Medford – Park Falls Ranger District indicated that 63 roads with a combined mileage of approximately 297 miles scored high; 23 roads with a combined mileage of approximately 82 miles scored medium; and 37 roads with a combined mileage of approximately 83 miles scored low for potential resource impacts. Figure 5-1 illustrates the percent of potential impacts roads per issue (Aquatics and Water Quality, TES species, Non-native Invasive Species, Slope, and Access) that scored high, medium, and low. Specific roadway results are identified in the Roads Analysis Matrix in Appendix B.

**Figure 5-1. Medford – Park Falls Scoring Results for Roads with Potential Impacts**

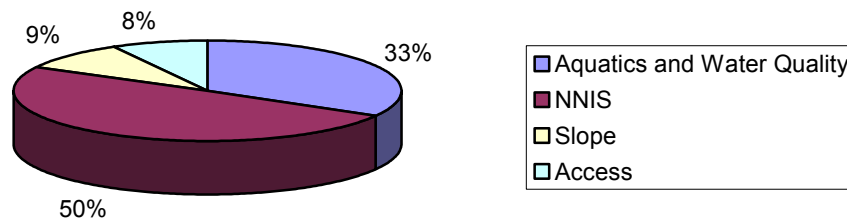




### Roads Scoring Medium with Potential Impacts



### Roads Scoring Low with Potential Impacts



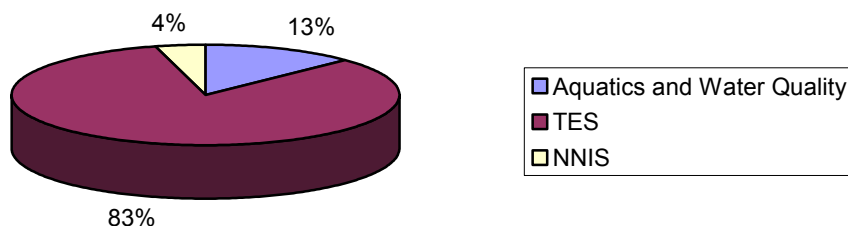
### Great Divide Ranger District

The scoring results for the Great Divide Ranger District indicated that 67 roads with a combined mileage of approximately 383 miles scored high; 26 roads with a combined mileage of approximately 79 miles scored medium; and 45 roads with a combined mileage of approximately 108 miles that scored low for potential resource impacts. Figure 5-2 illustrates the percent of roads per issue (Aquatics and Water Quality, TES species, Non-native Invasive Species, Slope, and Access) that scored high, medium, and low. Specific roadway results are identified in the Roads Analysis Matrix in Appendix B.

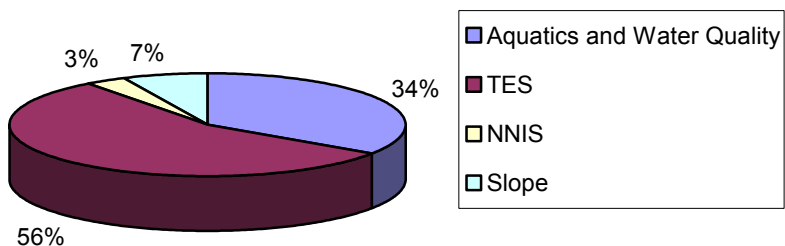


**Figure 5-2. Great Divide Scoring Results for Roads with Potential Impacts**

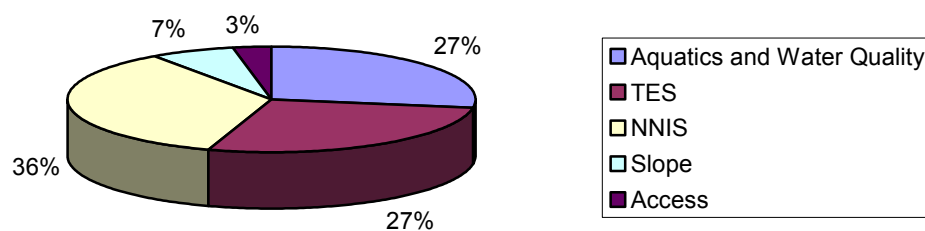
**Roads Scoring High with Potential Impacts**



**Roads Scoring Medium with Potential Impacts**



**Roads Scoring Low with Potential Impacts**



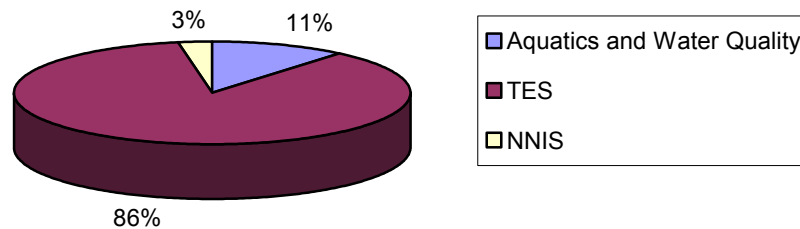


### **Eagle River - Florence Ranger District**

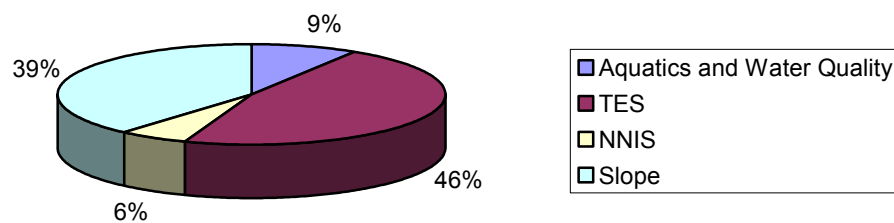
The scoring results for the Eagle River - Florence Ranger District indicated that 136 roads with a combined mileage of approximately 447 miles scored high; 89 roads with a combined mileage of approximately 18 miles scored medium; and 142 roads with a combined mileage of approximately 140 miles scored low for potential resource impacts. Figure 5-3 illustrates the percent of roads per issue (Aquatics and Water Quality, TES species, Non-native Invasive Species, Slope, and Access) that scored high, medium, and low. Specific roadway results are identified in the Roads Analysis Matrix in Appendix B.

**Figure 5-3. Eagle River - Florence Scoring Results for Roads with Potential Impacts**

#### **Roads Scoring High with Potential Impacts**

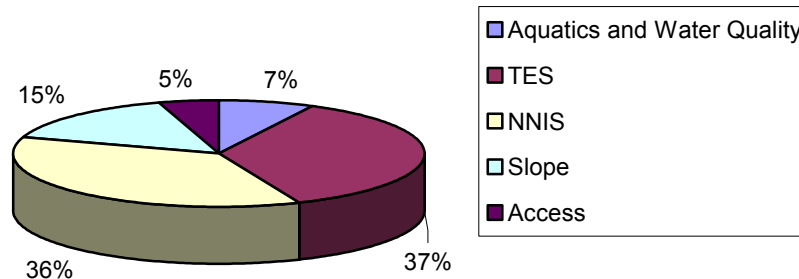


#### **Roads Scoring Medium with Potential Impacts**





### Roads Scoring Low with Potential Impacts

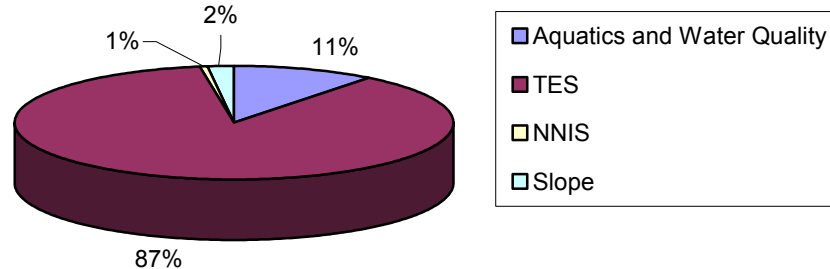


### Lakewood - Laona Ranger District

The scoring results for the Lakewood - Laona Ranger District indicated that 197 roads with a combined mileage of approximately 623 miles scored high; 115 roads with a combined mileage of approximately 127 miles scored medium; and 192 roads with a combined mileage of approximately 154 miles scored low for potential resource impacts. Figure 5-4 illustrates the percent of roads per issue (Aquatics and Water Quality, TES species, Non-native Invasive Species, Slope, and Access) that scored high, medium, and low. Specific roadway results are identified in the Roads Analysis Matrix in Appendix B.

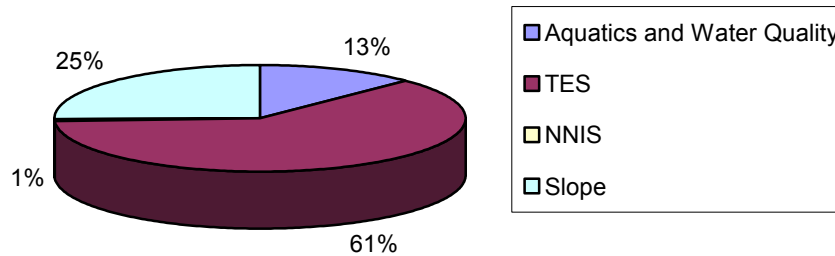
**Figure 5-4. Lakewood - Laona Scoring Results for Roads with Potential Impacts**

### Roads Scoring High with Potential Impacts

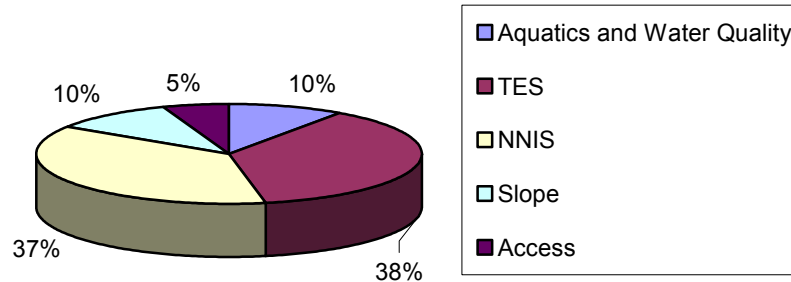




### Roads Scoring Medium with Potential Impacts



### Roads Scoring Low with Potential Impacts



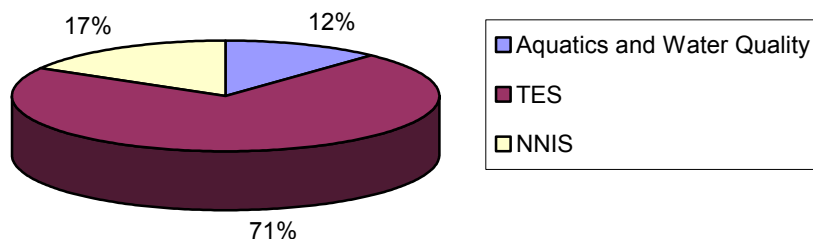
### Washburn Ranger District

The scoring results for the Washburn Ranger District indicated that 42 roads with a combined mileage of approximately 232 miles scored high; 27 roads with a combined mileage of approximately 88 miles scored medium; and 15 roads with a combined mileage of approximately 44 miles scored low for potential resource impacts. Figure 5-5 illustrates the percent of roads per issue that scored high, medium, and low. Specific roadway results are identified in the Roads Analysis Matrix in Appendix B.

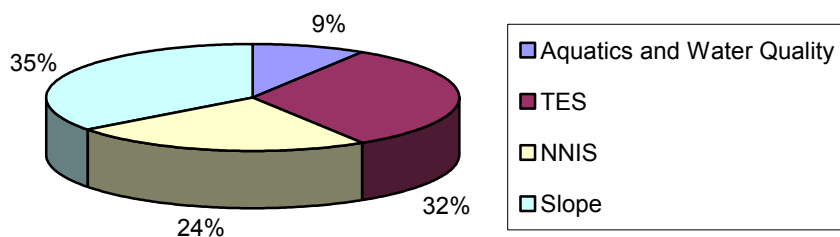


**Figure 5-5. Washburn Scoring Results for Roads with Potential Impacts**

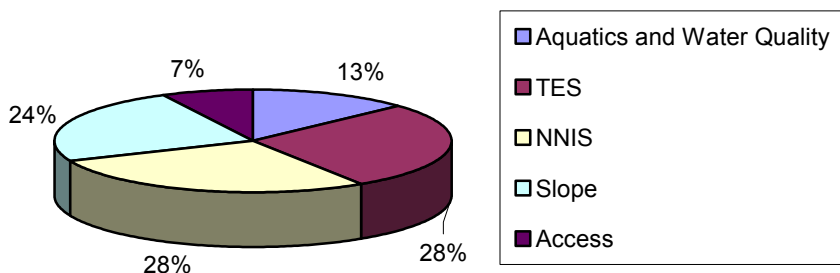
**Roads Scoring High with Potential Impacts**



**Roads Scoring Medium with Potential Impacts**



**Roads Scoring Low with Potential Impacts**





## 5.2 Assessment of Building Roads in Currently Unroaded Areas

The assessment of building roads in current unroaded areas is not part of the Roads Analysis process, per FSM 7712.16 and will be part of the Forest Plan process.

## 5.3 Opportunities for Addressing Problems and Risks

Detailed opportunities for addressing problems and risk for specific Forest Service roadways are attached in Appendixes C – G. For all Ranger Districts, some roadways have steep slopes and there may be opportunities to reduce the roadway slope through relocation and reconstruction of the roadways.

A summary of opportunities to minimize impacts and improve the road system in the Medford – Park Falls Ranger District includes an opportunity to pave various roadways that have high traffic volumes. The paved surface would minimize dust, decrease the potential for washout and increase roadway stability. However, paved surfaces could cause petroleum runoff to occur and increase storm water runoff. In residential areas, lower speed limits could be posted to reduce speed, which would increase safety for users. Other roadway surfaces are in poor condition, and an opportunity to re-gravel and re-grade them could reduce erosion and runoff.

A summary of opportunities to minimize impacts and improve the road system in the Great Divide Ranger District includes an opportunity to relocate roadway intersections to avoid environmental impacts. Other opportunities include replacing existing road/stream crossings with new structures that reduce erosion and sedimentation, while increasing fish passage opportunity.

A summary of opportunities to minimize impacts and improve the road system in the Eagle River - Florence Ranger District includes an opportunity to pave various roadways to reduce dust, which decreases roadway visibility. The paved surface would minimize dust, decrease the potential for washout and increase roadway stability. However, paved surfaces could cause petroleum runoff to occur and increase storm water runoff. Other opportunities include replacing existing road/stream crossings with new structures that reduce erosion and sedimentation, while increasing fish passage opportunity.

A summary of opportunities to minimize impacts and improve the road system in the Lakewood - Laona Ranger District includes an opportunity to improve roadway drainage by ditching and replacing existing culverts. Some roadways have sharp corners that are potential safety hazards. There may be opportunities to modify the roadway alignment and construction a safer alternative.

A summary of opportunities to minimize impacts and improve the road system in the Washburn Ranger District includes an opportunity to replacing existing road/stream crossings with new structures that reduce erosion and sedimentation, while increasing fish passage opportunity.

The opportunities, and ultimately the design of the roadway, should give an equal weight to safety, impacts on the environment, and the cost of the transportation system. (FSM 7721.1)



## 5.4 Setting Priorities

The CNNF currently uses an Integrated Investment Planning Process (I2P2) to develop its project proposals for the upcoming years. The goal of I2P2 is to perform projects that will produce significant improvements to the forest's assets, while increasing forest health and public safety. Project objectives from Forest Service specialists; forest management; and local and state agencies are provided for five project types and listed below.

**Table 5-1. Forest Service Project Selection Objective Priorities**

Resource Professionals	Objectives for Each Project Type				
	Roads	Bridges, Dams, and Major Culverts	10% Watershed Projects	Facilities Projects	Recreation Projects
<b>Botanist</b>	NNIS control	---	NNIS control	---	---
<b>District Line/Staff</b>	Accessibility, fire needs, high use areas, economics	Accessibility, fire needs, high use areas, economics	Accessibility, fire needs, high use areas, economics	Accessibility, fire needs, high use areas, economics	Accessibility, fire needs, high use areas, economics
<b>Engineering</b>	Administrative, public, and private usage; safety; and economics	Sedimentation, and erosion control; safety; and economics	Sedimentation, and erosion control; safety; and economics	Administrative, public, and private usage; safety; and economics	Administrative, public, and private usage; safety; and economics
<b>Fishery Biologists</b>	Fish migration, spawning, and habitat	Fish migration, spawning, and habitat	Fish migration, spawning, and habitat	---	---
<b>Forest Management</b>	Access requirements and timing of future entries	Access requirements and timing of future entries	Access requirements and timing of future entries	---	---
<b>Hydrologist</b>	Water quality; road/stream crossings, hydrologic connectivity, wetland areas, riparian zone, culvert size and placement	Water quality; road/stream crossings, hydrologic connectivity, wetland areas, riparian zone, culvert size and placement	Water quality; road/stream crossings, hydrologic connectivity, wetland areas, riparian zone, culvert size and placement	---	---
<b>Recreation</b>	Recreation opportunities and demand	Recreation opportunities and demand	---	Recreation opportunities and demand	Recreation opportunities and demand
<b>Wildlife</b>	Avoid TES species areas	---	Avoid TES species areas	---	---

**Table 5-2. Priorities of Local Government and State Agencies**

Agency	Objective for Each Project Type				
	Roads	Bridges, Dams, and Major Culverts	10% Watershed Projects	Facilities Projects	Recreation Projects
<b>Local Governments</b>	Public and private usage; safety; and economics	Sedimentation, and erosion control; safety; and economics	Sedimentation, and erosion control; safety; and economics	---	---
<b>WDNR</b>	---	Water quality, habitat, and Best Management Practices	Water quality, habitat, and Best Management Practices	---	---

#### 5.4.1 Roads

Roads are prioritized based on human health and safety; high forest use areas; recreation and public usage; forest health access needs; deferred maintenance; and achievability. Issues that are considered include the overall usage for public, private, and administrative purposes. Input from USDA Forest Service personnel and local government agencies were taken into consideration when ranking these projects for funding.

#### 5.4.2 Bridges, Dams and Major Culverts

Bridges, dams, and major culverts are prioritized based on their safety and environmental degradation. Projects are selected from the road/stream crossing inventory and bi-annual safety inspections. Inspections of structures are conducted to gather information on deficiencies for routine repairs, safety issues, and water quality concerns. Input from USDA Forest Service personnel, local government agencies, and the WDNR were taken into consideration when ranking these projects for funding.

#### 5.4.3 10% Watershed Projects

The 10% watershed projects are ranked according to those projects that improve the health of the forest watershed. Projects are selected based on their ability to eliminate or mitigate sedimentation, siltation, and erosion. Furthermore, projects are selected that would have a positive impact on fish habitat, fisheries health, fish migration, and water quality. Input from USDA Forest Service personnel, local government agencies, and the WDNR were taken into consideration when ranking these projects for funding.



#### **5.4.4 Facilities Projects**

Facilities projects are ranked forest-wide based on their safety and health issues; forest needs; access; achievability; and deferred maintenance. Input from USDA Forest Service personnel was taken into consideration when ranking these projects for funding.

#### **5.4.5 Recreation Projects**

Recreation projects are prioritized based on their needs for the forest. The projects are ranked based on their level of usage and need for improvement. Input from USDA Forest Service personnel was taken into consideration when ranking these projects for funding.

### **5.5 NEPA Analysis Needs**

This report provides a guide and a focus for mid-level analyses and project ccale Roads Analyses.